Contractor Engagement & Workforce Development – Deliver Program

Description

It is time to put all of your planning efforts to work by launching your program, recruiting and enrolling contractors, working with them to deliver energy efficiency upgrades, and collaborating with training provider partners to develop the energy efficiency workforce. All of the essential parts of your program—including identifying your key partners, making design decisions developing your implementation plan, selecting evaluation metrics, and preparing key resources—should be in place before this stage.

This handbook provides guidance and resources to help you:

- Ensure that your program partners, procedures, plans and resources are ready
- Recruit and bring contractors on board
- Consider a soft launch or pilot to test systems, work flows, and processes
- Provide program delivery support for participating contractors
- Verify the quality of your program services
- Integrate workforce development with contractor engagement.

You will deliver the contractor engagement and workforce development component of your program in coordination with the other components of your residential energy efficiency program, and before you launch the program itself.

Contractor Engagement & Workforce Development

Stages:

Find related information across other program components:

- **Program Design & Customer Experience – Deliver Program**
  Ensure a positive customer experience with your program from launch through implementation over time.
- **Marketing & Outreach – Deliver Program**
  Implement marketing and outreach activities in coordination with other program components to generate demand for your program's services.
- **Financing – Deliver Program**
  Launch your financing activities in coordination with other program components.

Step-by-Step

As you walk through the implementation plan that you have laid out, it is important to remember that while the plans and resources you have developed provide a critical foundation, you must adapt them to the actual and changing market to continuously refine and improve delivery.

Ensure that your program partners, procedures, plans, and resources are ready

Before you launch, it is worthwhile to step back and ensure that you have the necessary elements in place to successfully engage contractors and help prepare the workforce. You will want to walk through the full range of contractor engagement and workforce development steps:

- **Learn about the contractors and training providers in your local market**, including contractors working in HVAC, insulation, air sealing, and other trades that could offer home energy upgrade services.
- **Set goals and objectives** for your contractor engagement and workforce development, such as job creation and quality and energy services delivered.
- **Identify partners** to recruit and establish ongoing relationships with your contractors and workforce development partners.
- **Design procedures and standards for contractor participation** and quality assurance to support efficient program-contractor interactions and delivery of high-quality work.
- **Develop workforce development plans** to train local technicians and help them find employment as home performance professionals.
- **Develop evaluation plans** to identify the key measures you will need to track your progress toward achieving your contractor and workforce objectives.
- **Prepare key delivery resources** to ensure that contractors, program staff, and training provider partners are able to complete the activities smoothly and efficiently.

Consider a soft launch or pilot to test systems, workflows, and processes

As discussed with the other program components, prior to wide-scale deployment, you should consider a soft launch or pilot of your program to test systems, workflows, and processes. A pilot program is an experimental effort to test a concept or approach to determine whether a more significant investment in the approach is justified, whereas a soft launch is the quiet startup of a program where growth is already planned.

Work with the contractors who have participated in the stakeholder engagement process to run your pilot or soft launch. On the contractor side, program participation can be costly and disruptive, increasingly so as program complexity rises. Consequently, contractors can be hesitant to participate in the program. On the program side, kinks in systems and processes often become apparent only after the system has deployed. If you decide to do a pilot program, you should do so after you have conducted initial contractor recruitment and training efforts so that you will have a base of contractors available to perform initial assessments and upgrades.

In your pilot (or soft launch), consider using a very intensive account manager approach in which you work very closely with initial contractors to test systems and also provide a high level of assistance to contractors as you work out kinks in your processes. The objective is twofold:

1. You want to help contractors understand and work through program requirements, so they can succeed in the program. You can incorporate early successes into your **marketing materials** or contractor outreach materials (e.g., as testimonials and case studies to recruit other contractors, and in referrals).
2. The pilot allows program staff to better understand deployment from the contractor's perspective. The pilot also helps program staff spot problems in workflows, processes, forms, and program requirements. It is generally easier and less expensive to correct issues early on, before program volume ramps up. Similarly, insights on potential problem areas for your contractor partners can help you shift resources accordingly.

After conducting and learning from the pilot phase, you can shift your attention to launching the contractor engagement and workforce development components of your full program, followed by the launch of your overall program. This phase includes recruiting and onboarding contractors, providing contractor delivery support, verifying quality, and developing the workforce.

Boulder, Colorado Uses Pilot to Shape Program

Boulder, Colorado's EnergySmart program launched a small building pilot program in June 2010 to evaluate its approach and identify future workforce needs for completing building energy improvements—or energy-saving tune-ups—in the Boulder area. EnergySmart staff coordinated with local utilities, government entities, and other local partners to gather the following types of data to identify a sample of buildings for the pilot that would best represent the city's building stock:

- Building use
- Building size within specified ranges (e.g., between 5,000 and 50,000 square feet to avoid overlap with a local utility program)
- Type of cooling, heating, and air-handling equipment and the systems used to control them
- Decision-makers for the energy upgrades (e.g., building owner, tenant, property manager).

Based on an analysis of the sample of 15 buildings, Boulder established a set of common specific energy efficiency upgrades appropriate for similar buildings within the city, such as installing and scheduling programmable thermostats. Boulder found that all the buildings included in the pilot benefited from the energy-saving tune-ups. The pilot resulted in an average annual electricity savings of 9,468 kWh per building, an average annual utility cost savings of $1,995, and a total annual carbon dioxide emission savings of 259 tons.

As a result of the pilot, EnergySmart administrators understood the most common types of energy upgrades likely to be implemented. Lessons learned from the pilot included a greater understanding of seasonal factors, essential contractor training objectives, and realistic timelines for small buildings. After the pilot, EnergySmart distributed a **customer survey** to solicit participant feedback, and **integrated lessons learned** into contractor training.

Recruit and bring contractors onboard

Based on your **program design** and implementation plan and using your **recruitment materials**, begin recruiting contractors. Once your contractors are enrolled, you will help them acquire the necessary knowledge, skills, behaviors, and processes to begin making home energy upgrades.

Austin Responds to Contractor Needs to Promote Program Sustainability

By communicating and collecting input from contractors, **Austin Energy** developed a rich contractor network that serves as an extension of the utility's direct staff. Austin Energy worked collaboratively with contractors during its highly successful Best Ever Offer promotion in 2010, intentionally launched during the slow contracting season to help ensure steady work for contractors and avoid seasonal layoffs.

Austin Energy hosted breakfast meetings with contractors to review launch plans and provide an opportunity for contractors to ask questions and receive training on various program components. The utility responded to concerns about how to market financing options such that contractors felt better equipped to work with homeowners interested in home energy upgrades. Another concern reported by contractors during these meetings was the timing of contractor payments. Contractors often have very tight budgets, so Austin Energy responded to concerns about the lengthy payment processing by creating a system that delivers electronic rebate reimbursements directly to contractors within two weeks.

Austin Energy is also providing bonus incentives so demand for contractors does not come to a sudden halt once promotion-related work is completed.

*Source: **Spotlight on Austin, Texas: Best Offer Ever Produces Upgrades in Record Time** , U.S. Department of Energy, 2011.*

If you have done a soft launch or pilot, you will have experience to build on. You can conduct a launch event combining recruiting and basic training functions as part of a larger conference or as a standalone event, offering technical training sessions alongside a formal recruiting launch. Staff will develop contractor leads based on your initial **market assessment** and **partner identification** and on new information you gather as you move forward (e.g. as you attract the attention of previously unidentified contractors, or contractors become interested who previously were not, or you learn more about the types of contractors you need, or etc.).

Depending on the complexity of your program and your resources, you may choose to hold one-on-one recruitment meetings to explain the program benefits and enrollment to individual potential contractors. Staff should be ready with the **enrollment materials** you have developed.

With successful recruiting, you move on to enrolling contractors. This step entails reviewing and approving applications, providing orientation, and checking that contractors are eligible and prepared to deliver services. Having developed **enrollment material**, you can facilitate communications, level expectations, and streamline this process.

Provide program delivery support for participating contractors

With contractors enrolled and eligible to participate, program staff can focus on support needed to ensure continued contractor participation. Much of the support revolves around your approach to managing the contractor relationship, from hands-off processing useful in simple programs, to more involved account management, to actively working with contractors on a project-by-project basis. Most residential energy efficiency programs that move beyond simple rebate programs gravitate toward some form of account management to establish a primary point of contact for participating contractors. See **Develop Resources** for more discussion of the account manager role.

Next, deliver the program-specific, technical, and business training that you have planned and prepared for in your implementation plan and that you **developed resources** to support. As you proceed, you should not only be providing support but also gathering information and feedback as identified in your **evaluation plan**. Doing so will allow you to **assess how impactful your program is** and to make improvements as needed.

Your contractor support and workforce development activities should be closely coordinated with other aspects of program delivery. In particular, closely monitor the effectiveness of your program's **marketing efforts**, **program design**, and **financing** and align your contractor support and communications accordingly. Make sure that contractors know what kind of financing options are available to customers, and that they are equipped to communicate about financing and incentives with customers.

Michigan Provides Technical, Business, and Program Participation Mentoring

After providing technical training to contractors, **Consumers Energy Home Performance with ENERGY STAR program** in Michigan followed up with support for participating contractors. At one point, contractors became overwhelmed with program paperwork due to the number of applications they were required to complete (e.g. home performance surveys, energy efficiency kit installation surveys, reimbursement forms, etc.). The program deployed staff frequently to contractors' offices to assist them with the process and paperwork, help break the bottleneck, and improve the program's processes. The result was a steady stream of project completions. The program also expanded their technical training to include field mentoring.

The program went further to provide marketing and sales training using outside experts, including offering private coaching sessions. Program staff encouraged contractors to incorporate practices that would help their companies become self-sufficient as efficiency programs decreased or disappeared. This approach not only prepared contractors for the future but also strengthened their ability to participate more effectively within the program itself.

Verify the quality of your program services

As discussed in the guidance about your contractor engagement implementation plan, the quality of services that your program, contractors, and other partners deliver is fundamental to the integrity and success of your program. As you roll out your quality assurance activities, gather early data and feedback so that you can provide additional support or make adjustments when needed. These activities are discussed more fully in the Assess and Improve Processes handbook. Early success and real-time corrections to promote success are critical to the later participation of homeowners and contractors alike.

Integrate workforce development with contractor engagement

Much of your program's training will focus on ensuring that contractors participating in your program and their employees have the program knowledge, technical skills, and business skills needed to successfully delivery high-quality services to customers. Your **market assessment** and implementation plan might also specify an independent workforce development strategy that focuses on increasing the number of qualified home performance professionals in the labor market. This effort to develop new members of the home performance workforce can happen in parallel with your contractor engagement efforts.

Trained home performance professionals do not have jobs and work unless contractors in your community need them; therefore, try to sequence workforce development activities, so that trainees are ready for work at the time contractors are ready to hire. This timing is difficult to manage, but the more closely you stay in contact with your participating contractors and monitor their labor needs, the better you will be able to match trainee development to job opportunities.

Seattle Pilots a New Approach to Training

Community Power Works in Seattle piloted a new approach to training in order to meet contractor needs and the requirements of the city's high-road workforce agreement. The program's previous training programs did not meet contractor needs because they relied on an outdated model of training, failed to involve contractors in designing the training process and model, and lacked adequate support after the training for graduates to apply their skills and find jobs.

The new approach includes partnering with South Seattle Community College and the nonprofit Northwest EcoBuilding Guild, which offers classes and workshops, as well as participation by participating contractors. The program provides introductory prerequisite training to entry-level technicians who are new to home performance, as well as individual training modules that are tailored to more experienced workers (e.g. air sealing or shell insulation training modules). The program includes an option for contractors to hire entry-level technicians first, and then train them through the program. The training is free to the contractors. By establishing these ongoing collaborative partnerships, Community Power Works is developing a robust workforce of trained professionals for the future.

*Source: **Community Power Works Better Buildings Conference Presentation**, Community Power Works, 2012.*

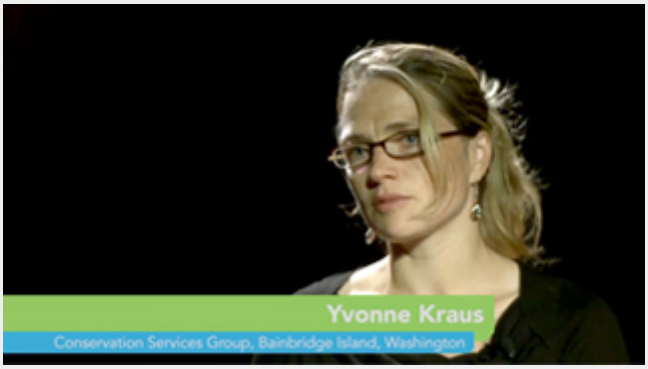
Tips for Success

In recent years, hundreds of communities have been working to promote home energy upgrades through programs such as the Better Buildings Neighborhood Program, Home Performance with ENERGY STAR, utility-sponsored programs, and others. The following tips present the top lessons these programs want to share related to this handbook. This list is not exhaustive.

Establish collaborative partnerships with contractors and communicate with them early and often

Contractors are more likely to serve as program champions when the program engages with them throughout program design, delivery, and improvement. Your contractors are the primary contact points with your customers, and the quality of their interactions and services strongly influences how customers view your program. Many Better Buildings Neighborhood Program partners found that gathering contractor input during the program's planning phase helped ensure that the program would create value for contractors as well as for customers. The programs built personal relationships with contractors by demonstrating interest in their business concerns and needs. Indeed, an **evaluation** of over 140 programs across the United States found that programs were more successful when they fostered relationships with their contractors and communicated frequently with them.

In Their Own Words: Engage with Contractors From Day One



Source: **In Their Own Words: Engage with Contractors From Day One**, U.S. Department of Energy, 2012.

By communicating regularly (e.g., via a monthly breakfast meeting, other outreach events) with a core group of contractors, programs were able to better monitor program implementation and receive suggestions for improvement. These programs elicited feedback from contractors about how customers perceived program offerings, as well as input about what was working and what was not for both contractors and customers. Some programs surveyed contractors to collect a regular stream of information about how program implementation was going and to get feedback before rolling out new offers or program design changes.

- **NeighborWorks of Western Vermont** maintained steady lines of communication with its network of contractors to help ensure that barriers to getting work done in a timely manner were identified early and that solutions were collaborative. The program held monthly one-on-one meetings with each contractor to review client status and progress and to identify any problems and potential training opportunities. The program also organized bimonthly group contractors meetings focused specifically on sharing new techniques or products. NeighborWorks used regular contractor communications, performance feedback, and contractor incentives and competitions to help contractors improve their assessment-to-upgrade conversion rates. By engaging contractors and including them from the start on any proposed program revisions or promotions, NeighborWorks was able to improve program delivery.
- **Enhabit**, formerly Clean Energy Works Oregon, program is charged with saving energy and supporting clean economic growth. Much of its success has come from engaging contractors in a continual learning and improvement process. Enhabit solicits feedback from contractors at meetings every two weeks and uses this feedback to guide improvements. With support from the Energy Trust of Oregon, a few contractors collaborated to create the **Home Performance Contractors Guild of Oregon**, which enables contractors to organize their opinions into a unified voice and have a more formal role in program and regional policy discussions. When Enhabit engaged a new financing partner, the program asked the Guild to examine the loan product and approval process. Input from the Guild helped ensure that the product was something that contractors would be able to explain and promote to customers.

- In Washington State, the **Repower Kitsap** program started in a region where the home improvement market was fragmented and under-developed. Contractors were initially wary of one another, tended to work only in their specialty, and often did not have working relationships with one another. The program established monthly brown bag meetings to discuss program goals and requirements and to gather contractor input on the program. The monthly meetings helped contractors get to know and trust one another and develop productive working relationships. Many contractors even shared leads with other contractors who specialized in the types of projects they could not or did not want to handle.
- The **Long Island Green Homes** program began consulting with contractors during program design and continued to do so as the program launched and began full service operations. The program established contact with a core group of contractors it trusted, meeting with them regularly to review program status and direction. In particular, the program made it a priority to engage with contractors when rolling out program changes, asking them about their needs, concerns, and current state of business. In this way, the program ensured that program offerings were adding value for the home performance industry and that program requirements were manageable for contractors. For more information on the Long Island Green Homes' launch and other pilot programs, visit the **October 2011 Better Buildings Residential Network Peer Exchange Call Summary**.

Help contractors enter the home performance market by lowering barriers to entry

Entering a new market adds risk to contractors' businesses. As several Better Buildings Neighborhood Program partners focused on their efforts to attract contractors, they realized that it would be valuable for them to help contractors enter the home performance market. Many programs took steps to lower or eliminate unnecessary hurdles or barriers to contractors' successful entry into the market. These barriers included long delays to receive payment for the program, paperwork burdens that were sometimes excessive enough to make contractors reluctant to participate, program expectations that were unclear to contractors, and upfront costs (e.g. for equipment purchases).

In Their Own Words: Mentoring Benefits Both Program and Contractor

Source: **In Their Own Words: Mentoring Benefits both Program and Contractor**, U.S. Department of Energy, 2012.

To help contractors overcome these barriers and enter the home performance market, many programs have provided program orientations covering expectations and procedures, offered mentoring and networking opportunities, and worked with contractors to improve work processes. Some programs have offered equipment loan programs, subsidized training, and other services to lower the upfront costs of entering the home performance market. Taking steps to help contractors enter the home performance market can help you establish a trained workforce of high-quality contractors to support home performance work.

- **Rutland County, Vermont** recruited and trained qualified technicians and "loaned" them to smaller contractors, to help them scale up to meet demand while mitigating business risk. The program set up a temporary labor pool that contractors could access when they needed greater capacity to meet demand. The labor pool helped new technicians enter the home performance industry, and helped smaller contractors weather seasonal fluctuation in market demand. Ten employees had worked in the labor pool as of 2012, with about three to five workers in the pool at any given time.

- **Fayette County, Pennsylvania** helped **contractors enter the market** by providing grants and financing to minimize startup costs, and by giving contractors the opportunity to provide Building Performance Institute (BPI) certification to their technicians. The program partnered with a local private industry council to train technicians to become BPI certified at no cost to students. The partnership program helped new home performance professionals start new businesses, for example, by providing grants and low-interest loans to purchase computer software and professional equipment. Ninety-four individuals completed the training through the partnership program. Training and certification in the home performance industry provided Fayette County residents with an opportunity for stable and well-paying careers. Ten employees had worked in the labor pool as of 2012, with about three to five workers in the pool at any given time.
- New Hampshire's **Beacon Communities Project** sought to reinvigorate the local economy of Berlin, New Hampshire, following the 2006 closure of a pulp mill. The program began working with local community colleges to provide BPI-certified training to develop more qualified home performance professionals. The program supplemented the training with mentoring opportunities for students who completed classroom trainings but needed more experience in the field before being hired by a contractor or starting their own company. In the nearly three years since the program's launch in September 2013, 42 students were trained through these classes and mentorships. These trained students helped the program offer quality home performance upgrades to homeowners, and the mentorship helped students become qualified home performance professionals.
- **Enhabit**, formerly known as Clean Energy Works Oregon, provided **networking and mentoring opportunities** to help contractors enter the home performance market. The program connected new contractors with peer mentoring services, allowing them to shadow an experienced professional in the field and office and get focused guidance from top-performing contractors. Mentors are compensated with additional project leads from the program. Enhabit also held morning meetings twice monthly for contractors to connect with each other. Contractors were able to use these meetings to organize and coordinate with the **Home Performance Guild of Oregon**, helping enable the Guild to expand significantly and to hire its first full-time executive director. As of December 2015, the Guild had over 50 home performance contractor members across Oregon, including more than two-thirds of the program's contractors.

Establish a clear system and process for ensuring quality work

A residential energy efficiency program's success is dependent on the quality of work that contractors conduct in customers' homes. Indeed, an in-depth **examination** of selected program strategies found that effective quality assurance and quality control programs provided a foundation for quality upgrades and were achieved through numerous program design and implementation decisions and follow-through. Many Better Buildings Neighborhood Program partners and Home Performance with ENERGY STAR Sponsors found that tiered and onsite quality assurance strategies, in addition to file reviews of upgrades reported to the program, worked well. Most programs use a tiered approach, in which a program inspects the first several upgrades completed by a new contractor and then inspects a specified percentage of subsequent projects. Onsite quality assurance is a useful strategy, both as a way of gathering feedback and as a training opportunity.

Programs conduct a broad range of verifications, including checking contractors' certifications regularly, implementing a mechanism to re-check certifications, and verifying home performance professional safety skills (e.g., combustion training). In addition to inspections and feedback, some program also identified standards for ensuring quality work, including standards for technical work, for diagnostic tools and installed equipment, and for professionalism and customer service. Setting those expectations helped allow contractors to understand what was expected of them and better enabled them to help programs be successful from the beginning.

- In New York, **NYSERDA** uses a tiered approach for quality assurance. Inspection rates vary based on the contractor's status in the program (see **NYSERDA's QA Procedures**). The program inspects the first three projects that all contractors complete. After these initial projects, the program inspects 15% of a contractor's completed projects, and at least one project annually. Customers may also request that field inspections be conducted within one year of the contractor's work. If contractors have repeated QA/QC issues, NYSERDA increases the field inspection sampling rate, generally to 50% or more. If problems persist and are not resolved, NYSERDA sometimes suspends contractors from the program according to its QA procedures.
- The **RePower program** on Bainbridge Island, Washington, created a standardized process for quality control inspections. Energy upgrades completed under the RePower program could be randomly selected for quality control inspections, and were rated "Pass," "Needs Minor Corrective Action," or "Needs Major Corrective Action" based on the current **RePower *Weatherization Specifications Manual***. If problems were found to require corrective action, contractors were required to perform the corrective actions at no additional cost to the customer. Repeated occurrences of an individual problem or serious problems resulted in a performance improvement plan or suspension from the RePower program. The program randomly selected 10% of their rebate applications for quality control inspection, and RePower staff worked to schedule an appointment with the homeowner within one week of selection.

- The **NeighborWorks of Western Vermont program** in Rutland County, Vermont, designed a quality assurance approach as a means to gather feedback and incentivize improvement. The program produced monthly contractor performance reports that compared contractor conversion rates, and then provided incentives to top performers. This approach was a productivity driver that encouraged contractors to make improvements to their business practices. During monthly one-on-one meetings, the program checked on each contractor's client status list, made sure that no customers fell through the cracks, and gathered contractor feedback during the conversation. The program also set a timeline by which contractors must submit assessment reports to homeowners, with penalties in place for late reports. Using this approach, wait times dropped from four months to three weeks. See the **Concierge Programs for Contractors webinar** for more information. This approach has given contractors and the program the opportunity to improve over time.
- The **Town of University Park, Maryland's STEP-UP program** worked to address variability in the quality of work that its contractors provided. The program approached this problem in two ways. First, STEP-UP issued a request for proposals for contractors that met specific performance benchmarks. From those proposals, the program then selected contractors with whom they had worked well in the past and began listing them as "preferred" contractors on their website. Ninety-nine percent of customers began selecting contractors from this list. Second, the program employed an energy coach for participating homeowners, to provide regular quality assurance of contractors' work. The coach provided intermittent inspections at customers' request, when they had concerns or when they chose to assist the program by allowing them to check on the contractors' performance. The energy coach reviewed work proposals for scope and price; as a result, customers were reassured that they were getting the work they needed at a reasonable market price and therefore were getting fair value. By playing these roles, the coach gave customers assurance that they were receiving high value work from contractors and incentivized contractors to do quality work.

Recognize and reward good contractor performance

Many programs used the information they gathered through their quality assurance efforts to recognize contractors that deliver consistent, high-quality work. Rewarding good contractor performance can help you build trust, strengthen partnerships, and boost workforce morale. You can incentivize contractors to work for these awards by posting them on your website, announcing them at awards ceremonies or other events, recognizing them in newsletters, and encouraging contractors to post the awards on their websites.

- **Enhabit**, formerly Clean Energy Works Oregon, singled out its contractors quarterly with honors such as the "James Brown Award" for the contractor with the most completed upgrades and the "Promoter Award" for showing the greatest job growth from one quarter to the next.
- The annual Charlottesville, Virginia, **Local Energy Alliance Program** (LEAP) "Blower Door Boss" award went to the contractor performing the most energy assessments while scoring the highest on customer surveys. The "Ruler of the Retrofits" title was bestowed on the company that scored the highest on customer feedback surveys and quality assurance reviews on home performance upgrades in Central Virginia.
- **Maryland's Be SMART program** used awards and public recognition of accomplishments to help motivate home performance contractors that worked hard to realize significant energy savings. Be SMART gave awards to top performers that completed the most upgrades. The program presented awards for the greatest number of HVAC and home performance upgrades, the highest assessment-to-upgrade conversion rate, and the "Accuracy Award" for best rebate paperwork submission.

Provide information to help customers pick the right contractor

Early on, many Better Buildings Neighborhood Program partners focused on providing customers with a range of contractors to choose from, while providing contractors with access to customers. Customer feedback received by some programs, however, indicated that customers were confused or overwhelmed by the choices. A comprehensive **evaluation** of selected program strategies implemented by Better Buildings Neighborhood Program partners found that programs were more successful when they provided customers with lists of pre-approved contractors; however, offering long lists of contractors without differentiating their products and services often led to inaction. To help customers distinguish between contractors and choose a qualified one, many programs provide customers with information about contractor skills, quality of past performance, proximity, and other factors. Some programs matched individual contractors directly with individual customers.

Customers can provide valuable information about the quality of contractors' performance, and this feedback can supplement other information, such as field inspections, used to differentiate contractors based on their performance. Many Better Buildings Neighborhood Program partners incorporated customer ratings into the order in which they list contractors online, to help future customers select a contractor. Some programs also used rankings to evaluate contractors, support disciplinary actions, allocate benefits, and identify retraining needs. Through this approach, contractors had the opportunity to improve their standing and reap the rewards when customers saw that they could be relied on to do high-quality work.

- On **Maryland's Home Performance with ENERGY STAR website**, homeowners can rate and review their contractors. Some contractors choose to reach out to their customers to encourage them to provide reviews. These customer reviews, along with contractors' accreditations and services, are published on the website as part of each contractor's information page. Users of the website can search for contractors and sort the results based on homeowner ratings and by geographical location. Users can also narrow their results according to which contractors participate in the customer's local utility rebate program.
- **Efficiency Maine** provided customers with a **"Find a Residential Registered Vendor" locator** on its website. This locator listed the services each contractor offered, sorted the list by distance from the homeowner, and differentiated contractors based on number of projects completed and customer satisfaction. All contractors were added to the list when they met the program's requirements. The list was sorted by location closest to the customer and number of completed projects, and also noted what services the contractor provides. The website also listed **questions** a homeowner could use to interview and evaluate contractors, such as "How soon can you begin?" and "How quickly will my work be completed?"
- The Town of Bedford's **Energize New York program** learned that selecting a contractor was the primary barrier for homeowners interested in home performance upgrades. The program addressed this challenge by developing a rating system to differentiate high- and low-performing contractors. Contractors' ratings were calculated using a combination of customer survey results, the number of BPI certifications held by their technicians, and their number of completed upgrade projects. Some contractors were dissatisfied when they received low ratings, and in follow-up discussions, program staff reminded contractors that they would have an opportunity for their score to be updated quarterly and reviewed the scoring criteria. As a result, many of those contractors decided to improve their overall score. The program also set a minimum standard of completed projects (i.e., six completed projects over the last four quarters) for contractors to be included in the program. This narrowing of available contractors made it much easier for customers to select one without being overwhelmed.
- Seattle's **Community Power Works** began matching homeowners one-on-one with certified contractors to create the best fit based on homeowner needs, contractor skills, and contractor availability. The program found that its past approach of suggesting two or three contractors led to indecision and that the potential price advantage of competition among these contractors was not an important factor in homeowner satisfaction.
    - Programs should be transparent about the process of matching individual contractors to customers and ensure that all qualified contractors have the chance to participate in the program by competing for upgrade projects.
    - While Community Power Works did not encounter any issues, programs should recognize that this approach can limit competition among contractors and discourage the growth of new contractors in the market. Most programs, including **Enhabit**, **Austin Energy**, **Energy Impact Illinois**, and many others, mitigate this by allowing contractors who bring their own customers to the program to keep them, providing an incentive for the contractor to market themselves instead of relying on the program to generate demand.

Have clear rules and systems for identifying and remedying contractor problems

Even with the best contractor partners, a program may sometimes encounter difficulties that require remediation. Consistent with Home Performance with ENERGY STAR program principles, many Better Buildings Neighborhood Program partners discovered that they could address these difficulties by establishing contractor requirements to set standards for quality work, a transparent remediation process, and measures for dismissing underperforming contractors. They found that the key is to make contractor requirements clear from the beginning of your program. Contractor participation agreements and codes of conduct for interactions with customers can help ensure understanding of standards and provide a rule of thumb for when issues needed to be addressed. Not all contractors are equally skilled or customer-service oriented. These programs learned that, in order to preserve their reputation, they needed to be able to confidently recommend any contractor on their list. It is important to apply corrective actions as needed in response to problems and deficiencies, as well as a procedure to respond to serious or recurring problems such as probation or dismissal from the program. By setting the bar high and dismissing contractors that failed to meet program requirements, these programs helped ensure consistent, quality customer service.

- **Efficiency Maine** developed a **Contractor Code of Conduct** that contractors sign, stating that they will respect the homeowner's property, minimize disruption to the homeowner, and leave the home in as good or better condition as it was found. It lists 15 things that contractors will and will not do relating to communications, onsite behavior, and work practices. To assure quality in the program, a minimum of 15% of upgrade projects are subject to random and/or targeted onsite inspections, covering the pre-installation, installation, and post-installation phases. **Efficiency Maine's Program Manual** outlines clear procedures that program staff will follow in the event that the inspections reveal errors, omissions, or inconsistencies. The manual also outlines procedures for removing a contractor from the program's registered vendor list for repeated failure to correct deficiencies.

- **Omaha and Lincoln, Nebraska's reEnergize Program** furnished its contractors with an Energy Upgrade Contractor Protocol and General Scope of Work, which governs contractor work processes and customer interactions. This protocol was intended to serve as a supplement to contractors' technical training. It provided rules that contractors were required to follow to achieve customer satisfaction throughout the upgrade process and also outlined basic safety requirements. Topics covered everything from how to greet the customer to cleanup steps once the upgrade was completed. The protocol was an important tool for ensuring that all homeowners had a pleasant experience with the program through their interactions with contractors. It helped the program achieve over 1,300 residential energy upgrades over a 3 year period that included program launch.
- The **Southeast Energy Efficiency Alliance** Better Buildings Chapel Hill WISE program in North Carolina discovered that even though contractors might have met the required program criteria and had qualifying credentials, the quality of their work and their understanding of building science varied substantially. To address these issues, Chapel Hill engaged an external training partner that worked with contractors on the quality of their work and the implementation of quality control mechanisms to improve future work. The program developed and implemented a contractor probationary and debarment policy and corrective action plan. Under that plan, contractors were subject to a **corrective process** that included a preliminary review of concerns, probation, specific requirements to return to the pre-qualified list after probation, and dismissal from the program. This policy helped the program systematically approach the issue of alerting contractors whose work fell short of the program's quality standards, and to dismiss contractors who were unable to improve the quality and consistency of their work.

Examples

The following resources are examples from individual residential energy efficiency programs, which include case studies, program presentations and reports, and program materials. The U.S. Department of Energy does not endorse these materials.

Case Studies

LaborWorks@NeighborWorks of Western Vermont Focus Series **(385 KB)**
Author: U.S. Department of Energy
Publication Date: 2012
LaborWorks@NeighborWorks is a nonprofit temporary labor pool developed by NeighborWorks of Western Vermont (NWWVT) to assist professional contractors involved with the NeighborWorks Home Energy Assistance Team (HEAT). In the first of this Focus Series, DOE interviews Melanie Paskevich, HEAT Squad coordinator, to get details on why NeighborWorks set up the temporary labor pool, how workers are recruited, and lessons learned for other programs to consider.

Spotlight on Austin, Texas: Best Offer Ever Produces Upgrades in Record Time **(555 KB)**
Author: U.S. Department of Energy
Publication Date: 2011
With its Best Offer Ever promotion, Austin Energy completed comprehensive energy upgrades in a record 564 homes in only six months--more than 10 times the utility's typical participation rate. To quickly develop momentum for BetterBuildings-Austin Energy's Clean Energy Accelerator program with homeowners, Austin Energy leveraged its existing Home Performance with ENERGY STAR infrastructure, experience, and contractor base but added a comprehensive rebate/financing offer for a finite launch period. Demand soared, and due to thoughtful planning, Austin Energy and its contractors were able to keep up with requests for energy assessments, inspections, improvements, and loan origination, while learning valuable lessons along the way.

Spotlight on Austin, Texas: Let Your Contractor Be Your Guide for Big Rewards **(445 KB)**
Author: U.S. Department of Energy
Publication Date: 2011
This case study discusses strategies that Austin Energy, a municipally owned utility, used to collaborate closely with building contractors to launch a new Best Offer Ever promotion quickly and effectively.

Spotlight on Fayette County, Pennsylvania: Developing the Skills and Tools for Workforce Success **(412 KB)**
Author: U.S. Department of Energy
Publication Date: 2012
This case study discusses strategies that Fayette County, Pennsylvania used to provide Building Performance Institute (BPI) certification and business skills training to aspiring energy efficiency contractors.

Spotlight on Maine: Contractor Sales Training Boosts Energy Upgrade Conversions **(411 KB)**
Author: U.S. Department of Energy
Publication Date: 2012
This case study explains how Maine provided contractor sales training to boost upgrade conversions.

Spotlight on Portland, Oregon: Making the Program Work for Contractors **(536 KB)**
Author: U.S. Department of Energy
Publication Date: 2011
As a program charged with saving energy and supporting economic growth, Clean Energy Works Oregon (now Enhabit) balances contractors' work priorities with the program's need to enforce quality standards, track results, and ensure good customer service. This case study discusses Clean Energy Works Oregon's (now Enhabit's) strategies for actively engaging contractors to make the program successful.

Program Presentations & Reports

Community Power Works Better Buildings Conference Presentation
Author: Andrea Petzel, Community Power Works
Publication Date: 2012
This presentation discusses the new approach to training that Seattle's Community Power Works program is using to support its high-road workforce agreement.

Contractors as Clients: Data Collection Made "Easy"
Author: Cynthia Adams, Local Energy Alliance Program
Publication Date: 2011
This presentation provides an overview of the process and tools the Local Energy Alliance Program (LEAP) of Charlottesville, Virginia uses to collect and report customer and contractor data on projects.

Contractor Recruitment Strategies **(770 KB)**
Author: Lee Butler, New York State Energy Research and Development Authority
Publication Date: 2010
This presentation provides information on strategies to successfully recruit contractors. Topics include setting goals, identifying contractors, contacting contractors, and following up with contractors.

High Road Outcomes in Portland's Energy Efficiency Upgrade Pilot
Author: Stacy Ho and Jeremy Hays, Green For All
Publication Date: 2011
This report highlights the impact of investment for Portland, Oregon in terms of high-quality job creation, equitable hiring, inclusive business opportunities, standardized training, and energy conservation.

The Leadership Academy: Motivating Contractors to Participate **(463 KB)**
Author: Gary R. Myers, Poudre Valley Rural Electric Association
Publication Date: 2011
This presentation explains how to engage and motivate contractors and utility companies through the use of commitments, creating a dynamic program that they can become involved with, and the setting of standards for contractors.

Philadelphia's Energy Coordinating Agency Apprenticeship Programs
Author: Liz Robinson, Energy Coordinating Agency
Publication Date: 2012
This presentation discusses Philadelphia's Energy Coordinating Agency Apprenticeship Program in energy conservation and building science, including programs for journeyman credentials and BPI certification.

Program Materials

Community High-Road Agreement for Seattle's Residential Retrofit Programs
Author: Community Power Works
Publication Date: 2010
This agreement outlines the goals, contractor standards, hiring standards, training program standards, and procedures for contractor participation in Seattle's Community Power Works program. As a "high-road" agreement, the employment and contracting standards are designed to ensure broad access to economic opportunities for all types of businesses and workers, support training on sustainable career paths, and ensure high-quality work.

Contractor Operations Guide for Boulder County's EnergySmart Service **(2 MB)**
Author: Populus Sustainable Design Consulting, LLC
Publication Date: 2011
This guide from Boulder County's EnergySmart service is an example of expectations and guidelines for contractor operations.

Efficiency Maine Contractor Code of Conduct **(55 KB)**
Author: Efficiency Maine
Publication Date: 2012
Efficiency Maine created a code of conduct for contractors to follow when working in homes. The code is available for download on the Efficiency Maine website, and dictates guidelines for respecting homeowners' property and communicating with the homeowner about appropriate information. Users on the Efficiency Maine website can search a list of vendors that have agreed to follow the code.

EnergySmart Colorado Assessment Process: Analyst Flowchart **(78 KB)**
Author: EnergySmart Colorado
This contractor process flowchart from EnergySmart Colorado includes the phases of contractor qualifications review and preparation, site work, and follow up.

Local Energy Alliance Program Home Performance with ENERGY STAR Contractor Participation Agreement **(198 KB)**
Author: Local Energy Alliance Program
Publication Date: 2013
This is a contractor participation agreement used by the Local Energy Alliance Program in Charlottesville, Virginia.

Community Workforce Agreement Between the City of Milwaukee and the Wisconsin Energy Conservation Corporation **(110 KB)**
Author: City of Milwaukee, Wisconsin; Wisconsin Energy Conservation Corporation
Publication Date: 2010
This is a community workforce agreement between the City of Milwaukee and the Wisconsin Energy Conservation Corporation.

NYSERDA's Home Performance with ENERGY STAR Process Flow Charts **(23 KB)**
Author: New York State Energy Research and Development Authority
Publication Date: 2010
Two visual flow charts, one that illustrates the process starting with customer interest to final incentive payment, and another that illustrates the program's quality assurance process.

NYSERDA Quality Assurance Procedures
Author: New York State Energy Research and Development Authority
Publication Date: 2012
This section of NYSERDA's Home Performance Contractor Resource Guide describes quality control procedures for initial review, field inspection, and administrative review of projects. Supporting worksheets are available to assist with compliance and verification.

RePower Problem Response Procedure **(441 KB)**
Author: RePower Program
Publication Date: 2013
This document details the procedures for identifying, documenting, and responding to performance problems associated with contractors in the RePower Program of Kitsap County, Washington. It includes example forms and a draft letter to contractors.

RePower Weatherization Specifications Manual
Author: RePower Kitsap
Publication Date: 2013
RePower in Bainbridge Island and Bremerton, Washington developed this manual as a set of rules and requirements for acceptable materials and installation procedures for energy efficiency measures installed in existing homes.

Request for Proposals for Phase V (Neighborhood Phase) of Clean Energy Works Portland (now Enhabit) **(226 KB)**
Author: Clean Energy Works Oregon (now Enhabit)
Publication Date: 2010
This is an example of an RFP for workforce development and other program elements. The RFP covers recruitment, outreach and marketing oriented to homeowners and workers, and service delivery of energy assessments and upgrades.

Vermont Community Energy Mobilization Project Home Visit Guide **(974 KB)**
Author: Efficiency Vermont
Instructional step-by-step guide for visiting a home to discuss and install energy efficiency measures.

Toolbox

The following resources are available to help design, implement, and evaluate possible activities related to this handbook. These resources include templates and forms, as well as tools and calculators. The U.S. Department of Energy does not endorse these materials.

Templates & Forms

Clean Energy Works Oregon (now Enhabit) Contractor Upgrade Template **(145 KB)**
Author: Clean Energy Works Oregon (now Enhabit)
Publication Date: 2011
This template, used by Clean Energy Works Oregon (now Enhabit), standardizes a number of forms that contractors fill out for the program.

Tools & Calculators

DOE Building America Solution Center
Author: U.S. Department of Energy
Publication Date: 2013
An interactive website that provides residential building professionals with access to expert information on hundreds of high-performance design and construction topics, including air sealing and insulation, HVAC components, windows, indoor air quality, and much more.

Green for All Energy Efficiency Toolkit
Author: Green For All
Publication Date: 2012
This practitioner-focused Toolkit for Residential Energy Efficiency Upgrade Programs was created by Green For All to assist new, established, and future energy efficiency programs launch and scale initiatives that can deliver the full promise of the green economy. It is intended as a practical resource that offers examples, tools, and templates that a program manager can deploy to implement a variety of aspects of their program including best practice briefs and summary documents, RFPs, contracts, and other program design and implementation templates that communities nationwide have used to create their own efficiency programs.

Home Energy Guide to Training Programs
Author: Home Energy Magazine
Publication Date: 2013
This web-based database, created by Home Energy home performance magazine, enables users to search for training programs nationwide. Users can filter training programs by weatherization training areas, BPI certifications, and more.

Topical Resources

The following resources provide additional topical information related to this handbook, which include presentations, publications, and webcasts. Visit **Examples** for materials from and about individual programs.

Topical Presentations

The Contractor-Participation-Inducing Home Performance Program Design Recipe Part 1
Author: Mike Rogers, OmStout Consulting, LLC
Publication Date: 2012
Presentation summarizing the important elements needed to induce and sustain contractor participation in home performance programs.

Five Steps to a Profitable Contractor Base
Author: Courtney Moriarta, SRA International, Inc.; Emily Levin, Vermont Energy Investment Corporation; Tiger Adolf, Building Performance Institute; Brad Geyer, Fayette County Better Buildings Initiative; Sammy Chu, Suffolk County Department of Labor; Sam Flanery, Building Science Academy
Publication Date: 2012
Presentation on five steps to building a profitable contractor base. The steps include sensible program design and administration, certification and credentialing, communicating with contractors, contractor requirements (business vs. trade), and training and sales support.

Residential Contracting Business Boot Camp
Author: Mike Rogers, OmStout Consulting, LLC
Publication Date: 2013
This presentation provides guidance to contractors on business fundamentals, marketing and lead generation, successful consultative selling and closing, and measuring and improving performance.

Publications

Contractor Blueprint: Getting from HVAC to Home Performance
Author: California Center for Sustainable Energy; Home Performance Resource Center
Publication Date: 2012
This guide shows HVAC contractors how to get started in the home improvement market. It explains the approach of treating a house like a system and provides step-by-step instructions on setting up a home performance contracting business.

DOE Guidelines for Home Energy Professionals
Author: U.S. Department of Energy
Publication Date: 2012
Guidelines for home performance professionals for quality work, effective training, and professional accreditation.

DOE Weatherization Assistance Program Technical Assistance Center Website
Author: U.S. Department of Energy
Publication Date: 2013
This website for DOE's Weatherization Assistance Program provides a virtual library of rules, regulations, policies, and procedures for helping low-income families reduce energy costs.

Green For All Minimum Standards for Residential Energy Efficiency Contractors **(104 KB)**
Author: Green For All
This checklist of minimum standards for residential energy efficiency contractors draws from several existing high-performing energy efficiency programs.

Home Performance with ENERGY STAR Sponsor Guide and Reference Manual (v1.5)
Author: U.S. Department of Energy
Publication Date: 2014
The Sponsor Guide was designed to assist with developing an implementation plan for a Home Performance with ENERGY STAR program. It covers key elements of the plan, including the scope and objectives of the program and the policies and procedures that will ensure its success. The Sponsor Guide is divided into seven sections, each covering a specific requirement of the HPwES Program:Use and Management of the Home Performance with ENERGY STAR MarkProgram Design and DevelopmentWorkforce Development and SupportThe AssessmentProject InstallationQuality AssuranceTracking and Reporting.

Ideas to Incentivize Contractors and Build a Strong Workforce **(93 KB)**
Author: U.S. Department of Energy
Publication Date: 2011
This publication provides tips from Better Buildings Neighborhood partners on incentivizing contractors.

Quality Assurance Best Practices: Home Energy Performance with ENERGY STAR Programs
Author: U.S. Department of Energy
Publication Date: 2011
This publication lists best practices for how to create a quality assurance plan and the components that these plans should include.

Residential Retrofit Program Design Guide
Author: Oak Ridge National Laboratory
Publication Date: 2011
The Residential Retrofit Program Design Guide focuses on the key elements and design characteristics of building and maintaining a successful residential energy upgrade program. The material is presented as a guide for program design and planning from start to finish, laid out in chronological order of program development.

Energy Island: A Guide to Creating Your Island Energy Challenge **(26 MB)**
Author: RePower Bainbridge; Conservation Services Group; U.S. Department of Energy
Publication Date: 2014
This guide is designed to serve as a "how-to" reference for island communities (or small, similarly sized, more isolated communities) that want to develop and implement a residential energy-efficiency and conservation program. The purpose of this guide is to help communities chart a course for successful program development based on the lessons learned during implementation and operation of RePower Bainbridge, an energy-efficiency program on Bainbridge Island, Washington.

Webcasts

Concierge Programs for Contractors - They're Not Just for Consumers Anymore
Presentation **(1 MB)**
Author: Jonathan Cohen, U.S. Department of Energy; Ryan Clemmer, Clean Energy Works Oregon (now Enhabit); Melanie Paskevich, NeighborWorks; Jay Karwoski, ICF International
Publication Date: 2012
This webcast includes slides and information on programs' use of concierge programs to support contractors. It highlights two program examples: Clean Energy Works Oregon (now Enhabit) and Vermont NeighborWorks.

Guidelines for Home Energy Professionals Project
Presentation, **Media**
Author: National Renewable Energy Laboratory
Publication Date: 2015
This webinar discusses the guidelines for home energy professionals project. The goal of the project is to collaborate with industry to develop the tools needed for a high-quality residential energy upgrade industry, supported by accredited training programs, and a skilled and credentialed workforce. It also discusses Standard Work Specifications (SWS) which define the minimum requirements for high-quality, safe, and durable installations.